

REMARKS

The Office Action dated March 31, 2004 has been received and its contents carefully studied. Reconsideration of the rejections of the claims is respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-14 and 16-24 are pending. The only independent claims (prior to this amendment) were claims 1, 7, 23, and 24. Claim 23 is allowed, and dependent claims 9-14 and 16 are also indicated to be allowable. However, the remaining claims are rejected.

Independent claim 1 is rejected as obvious under 35 U.S.C. 103(a) from *Azima* '775 (U.S. Patent No. 6,188,775). Independent claims 7 and 24 are rejected as obvious under 35 U.S.C. 103(a) from *Azima* '775 in view of *Azima* '282 (U.S. Patent No. 6,442,282).

The Present Amendments

Claim 1 is amended merely to correct the grammar, and also to include two additional wherein clauses that are supported at least by page 5 of the application, lines 20-23. Thus, claim 1 now recites additional properties of the sandwich plate that are essential to the present invention. This amendment of claim 1 is intended to expedite allowance, and is not meant as any kind of admission regarding the cited references.

Claim 8 is amended to eliminate an antecedent basis problem. Claims 9 and 16 are placed in independent form, to put claims 9-14 and 16 into condition for allowance. New claim 25 is specified a fractal arrangement (e.g. see page 6 of the application, lines 3-4; page 9, line 27).

Further Remarks

It is respectfully submitted that the present amendments of claim 1 render the claim allowable, because the cited *Azima* references do not teach or suggest a sandwich plate having the characteristics described in present claim 1, namely bending wavelengths smaller than a surface

diagonal of the sandwich plate, and a bending resonance under a band containing the higher sound frequencies. These characteristics are essential to the present claimed invention, and they are clearly defined by amended claim 1.

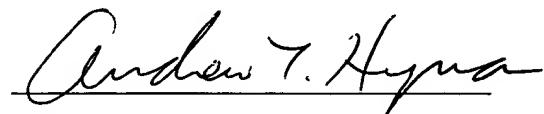
With regard to present claim 4, the Office Action at page 4 asserts that it would have been obvious to include a spatially different distribution of elasto-mechanical properties (e.g. by using cut-outs), for achieving "vibrational frequency response desired." However, the Applicant respectfully submits that the present invention already achieves the vibrational frequency response desired, and the spatially different distribution is for a different purpose: namely, to increase shear strength of the sandwich plate as discussed at page 4, lines 4-20 of the application. The present invention discloses combining the honeycomb structure of claim 3 with the spatially different distribution of claim 4 (i.e. claim 4 depends from claim 3), and the Office Action has not shown this combination in any reference, and has not shown why the honeycomb structure would be insufficient without the spatially different distribution, in order to obtain adequate shear strength. Applicant would like to respectfully point out that the application emphasizes (at page 4, lines 15-17) the fact that this combination is very useful for increasing the shear strength, and Applicant submits that this is a non-obvious and very innovative combination. The Office Action seems to suggest (page 4, second paragraph), that such a combination would have been obvious in order to achieve desired thickness, but the Office Action does not suggest any reason why a non-uniform thickness would be obvious given that the core layer already has a honeycomb structure. *Spec. Rule 101*

CONCLUSION

For all of these reasons, it is not perceived that the claimed invention can be derived from the related art, or how it might be obvious in view of the related art. The references cited do not suggest what is set out in the applicant's amended claims, and do not provide the basis for developing the invention to persons having ordinary skill in the art to which the subject matter

pertains. Therefore, withdrawal of all of the rejections is respectfully requested, and early allowance is most earnestly solicited.

Respectfully submitted,



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Dated: June 3, 2004

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